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DOCKET
06-AFC-5
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February 14, 2007

James W. Reede, Jr., Ed.D.
Energy Facility Siting Project Manager
California Energy Commission
1516 - 9th Street
Sacramento, CA 95814

RE: Revised Panoche Energy Center Power Plant Project (06-AFC-5) AFC Figure 5.5-5, Daily and Annual Water Flows

Dear Dr. Reede:

Please find the enclosed 75 hard copies of the revised Panoche Energy Center Application for Certification Figure 5.5-5, Daily and Annual Water Flows. This table is located on page 5.5-8 of the AFC. Please advise your staff to replace the original page 5.5-7 & 5.5-8 with a copy of the enclosed revised page (it is 3-hole punched and double sided).

Please note that the electronic copy (pdf) of the replacement page (page 5.5-8) was e-mailed to you.

If you have any questions or concerns please do not hesitate to call me at 714-648-2759.

Sincerely,

Margaret M. Fitzgerald
Program Manager

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PROOF OF SERVICE (REVISED 12/19/06) FILED WITH
ORIGINAL MAILED FROM SACRAMENTO ON 2/16/07
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outflow standards under the federal Clean Water Act (CWA) and establishment of more stringent water quality standards by the State Water Resources Control Board. In other actions the CVP was required to provide approximately 400,000 acre-feet per year to wildlife refuges, and up to an additional 800,000 acre-feet per year for restoration of fisheries. One of the most significant resulting operational changes was a reduction in delta export pumping for a minimum of 30 days in the spring for protection of out-migrant San Joaquin River salmon smolts and delta smelt.

Year-to-year surface water allocations and ground water pumpage varied significantly between 1976 and 2006. During this period, groundwater pumpage ranged from a low of 15,000 acre-feet to a maximum of 600,000 acre-feet in 1991 and 1992. Ground water levels show maximum annual variations of up to -97 ft/yr (declining) to positive (increasing) levels of up to 89 ft/yr. Known surface water deliveries and groundwater pumping in the Westlands Water District between 1976 and 2006 are summarized in Appendix R.

5.5.1.9 Effects of Future Use on Groundwater Basin by Others

Since its inception, the Westlands Water District has been faced with shallow groundwater drainage problems over an area of up to 200,000 acres that the federal Bureau of Reclamation (BOR) was obligated to remedy. Following passage of the CVP Improvement Act, BOR initiated a land retirement program in which drainage-impacted lands were purchased and taken out of irrigated production. As of 2006, a total of nearly 100,000 acres has been retired. The BOR recently released a San Luis Drainage Features Re-evaluation Report and EIR/EIS in which the recommended alternative is additional land retirement in lieu of providing drainage service. Ultimately the total acreage retired in the Westlands Water District may reach 200,000 acres or more, reducing total annual District demand by up to 500,000 acre-feet.

As a part of the land retirement program, CVP contract water supplies associated with the retired land will remain with Westlands Water District. This will increase the water supplies available to remaining lands and reduce the year-to-year variability in surface water supplies and groundwater pumpage. In the long term this can be expected to stabilize or increase groundwater levels throughout the basin.

5.5.2 Project Water and Wastewater Needs

The water balance diagrams (Figure 3.4-8 and 3.4-9) show the potable and process water flow streams for the maximum use day and the average day. Table 5.5-5 shows the maximum daily, average daily, and average annual water supply and disposal flows. Water needs at the PEC are limited primarily by the use of simple-cycle combustion generation technology and rather than more water-intensive steam generation technology.

TABLE 5.5-5
DAILY AND ANNUAL WATER FLOWS

	Maximum Daily (1000's gal/day)	Average Daily (1000's gal/day)	Average Annual (Acre-ft/year)
Production Well Supply			
Cooling Tower Makeup	1,647	1,238	793
Demineralizer System	534	511	328
Evap Cooler Makeup	62	14	9
Plant Service Water	7	7	5
Total Process Water	2,250	1,770	1,135
Wastewater Injection			
Cooling Tower Blowdown	514	388	248
RO System Rejects	133	128	82
Evap Cooler Blowdown	31	7	4
Plant Drains	14	14	9
Intercooler Condensation	48	3	2
Total	740	540	345
Water Well (Safety use only)	0.375	0.250	0.280
Septic System (Sanitary drains only)	0.375	0.250	0.280

Notes:
The maximum daily use is based on 24 hours of full load operation during the design hottest day (114ºF day/80ºF night).
The average daily use is 24 hours of the average of the full load use at the average monthly temperatures for every month.
The average annual use is based on 5,000 hours/year at the average daily rate, corresponding to the maximum plant capacity factor of 57 percent.

5.5.2.1 Alternative Water Supplies

Following is a summary of the alternative water supplies that are discussed in greater detail in the Alternatives presented in Section 4 of this document:

- Surface Water – Water present in lakes, streams and rivers.
- State Water Project – California Aqueduct located approximately 2 miles east of the project site.
- Federal CVP Water – Though structurally the same facility as the California Aqueduct, the CVP share of the joint use canal facilities is named the San Luis Canal.
- Reclaimed Water – Wastewater treatment plant effluent that has received tertiary treatment.
- Agricultural Wastewater – Drainage water from irrigation practices.

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA

APPLICATION FOR CERTIFICATION FOR THE PANOCHE ENERGY CENTER	**Docket No. 06-AFC-5 PROOF OF SERVICE (Revised 12/19/06)**

INSTRUCTIONS: All parties shall 1) send an original signed document plus 12 copies OR 2) mail one original signed copy AND e-mail the document to the web address below, AND 3) all parties shall also send a printed OR electronic copy of the documents that shall include a proof of service declaration to each of the individuals on the proof of service:

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DECLARATION OF SERVICE

I, Angela Hockaday, declare that on February 16, 2007, I deposited copies of the attached Revised AFC Figure 5.5-5, Daily and Annual Water Flows for the Panoche Energy Center Project (06-AFC-5), in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above.

OR

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.

Original signed in Dockets
[signature]